HEALTH-MATTERS

IN

JAPAN.

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THE problem which excites more interest than any other in the larger cities of our country is that in regard to the best disposition of sewage. People have slowly come to realize that in some way a series of disorders arises from the presence of waste matter in cities. So well ascertained is this fact that diseases which are attributed to the presence of filth are aptly called filth-diseases, and it is well that they are at last branded by their right name. One has only to consult the valuable reports of the State boards of health for infomation on these matters. In these reports he will find an overwhelming mass of evidence tracing typhoid fever, cholera infantum, and other diseases, to the presence of filth, and to its infectious character when communicating with water-supplies, or through its malarial gases affecting the air of houses. At present the causes of high death-rates are as certainly known as the course of storms. Indeed, the intelligent physician will predict the necessary consequences which must ensue from the presence in a crowded city of matter which should be removed. Interested as I have been in these subjects, I looked forward with considerable eagerness to an opportunity for studying the conditions which obtain among the Japanese concerning these matters. Their manner of living, their food, their domestic habits, are all so different from ours, that it naturally occurred to me, if these filth-diseases are as common here, with their cleanly habits, and the universal custom of removing offal from their dwellings, as with us where the same matter lies in a frightful state for months to pollute the neighborhood, then the points urged

in regard to the relations between filth-diseases and offal must be modified or abandoned.

What do the facts show?

At home, the following conditions are rightly looked upon as grave sources of danger: the presence of privies in the vicinity of wells, cellars filled with decaying vegetable matter, a water-closet or privy connected immediately with a house, or the ingress of sewagegas to a house. It is at present difficult to get any vital statistics regarding the Japanese. While the Government and people have made the most surprising strides toward the civilization of Western nations (for they have a civilization of their own which in many respects is far ahead of ours '), and have established normal schools and universities, medical and naval colleges, hydrographic and other surveys, they have not yet seen the importance of organizing a board of health.²

One would be justified in assuming that if these sources of danger existed, the foreigner, unacclimated as he is, would be more susceptible to their influence than the native. Dr. Stuart Eldridge, of Yokohama, a distinguished physician, who has had a long and varied experience in this country in hospital-work and as an active practitioner, has kindly furnished me with the following data at my request: "Scarlet fever almost unknown, never epidemic. Diphtheria almost unknown, never epidemic. Severer forms of bowel-disease, such as dysentery and chronic diarrhea, very rare. rial diseases of severe nature uncommon; even the milder forms in most localities not common. Typhoid and typhus rarely epidemic, the latter uncommon." With these facts before us, let us examine the conditions of living among these people. It is well known that their houses are so arranged that the winds blow through them from one end to the other. In summer they are entirely open. The privies are never connected immediately with the houses except among the lower classes in the larger cities, where, as in Tokio for example, among the poorer houses the privy is in the back part of the house, but even in these cases a close sliding-door always separates this apartment from the living-room, and a grated window without glass permits thorough ventilation. In the public inns, too, the privy is sometimes connected with the building, to the great discomfort of for-

¹ If some of the indications of civilization are to treat each other kindly, to treat their children with unvarying kindness, to treat the animals below them with tenderness, to honor their father and mother, to be scrupulously clean in their persons, to be frugal and temperate in their habits—if these features be recognized as civilized, then this pagan nation in these respects is as far ahead of us as we are ahead of the Tierra del Fuegans.

² We ought not to expect this of Japan, perhaps, since the representatives sent by Maine to her Legislature were, with few exceptions, too ignorant to appreciate the necessity of a State board of health, and were incredulous that the physicians who urged the measure so strongly were unselfishly working for its establishment!

eigners. In the country villages it stands alongside the road, separate from the house. Their sewage system, so far as I am aware, is superficial, and there is no sewage-gas to contaminate the air. The houses have no cellars, and consequently the air in them is not polluted from this source. On the other hand, their wells are not always properly situated, and the water is liable to pollution from gutters. The important point to be noted, however, is in regard to the disposition of their offal, and it is well known that every day or two this is removed and scattered on their rice-fields and other cultivated areas. The vaults consist of water-tight vessels of limited capacity. In Tokio they use for this purpose oil-barrels, which they coat with a kind of varnish inside and out. From the small size of this vessel accumulation never occurs, and from its nature the soil never becomes saturated by its contents. Men, instead of being paid to remove it, actually pay for it!

The Japanese having no cattle or sheep, but few horses, no pigs, and but few fowls at the most, depend entirely upon the sewage of towns for the fertilizing material of their farms. No one at home can form any idea of the perfect manner of this work. Even in as large a city as Tokio, with its million inhabitants, this service is performed with a neatness and thoroughness which surpasses belief. The foreigner finds one of his senses rudely assailed at times, though, as to that matter, he may go into one of the most refined cities of America, and, with the exception of a few summer months, encounter the same discomforts. Dr. David Murray has called my attention to the very important service performed by the crows and a kind of hawk which act as scavengers. We are so accustomed at home to find these birds especially wild and wary, that it is a somewhat startling sight to see them perching on the buildings in a crowded city like Tokio, and swooping down in front of you in quest of food, which might otherwise decay and vitiate the atmosphere. The destructiveness and brutality, generally speaking, of the children of Christian nations lead to the stoning of dogs, cats, and birds of all kinds. In Japan such a thing is unknown, and a stone thrown at a dog (I speak from experience) is generally answered by an inquiring look, hens hop out of the way, and even cats do not take the hint! In other words, the crows and hawks are never molested, and the result is that all carrion and other stuff left in the streets are pounced upon and carried off immediately.

As far as climatic conditions are concerned everything is most favorable for the development of filth-diseases, provided the sources of danger were present. In the summer months the heat is oftentimes oppressive, the moisture excessive, meat decays rapidly, and the decomposition of fruit and vegetables quickly ensues. With fruit especially ripeness is almost coincident with decay.

In regard to the personal habits of the people, it is interesting to

remark that they drink very little cold water. The water is drunk as hot tea—in other words, it is boiled. Of extreme importance, too, in regard to children's disorders, is the fact that, until they are two or three years old, they draw their nourishment from the maternal fount. No child is fed artificially.

On the other hand, it is interesting to note that the Japanese eat unripe fruit to an inordinate extent. The moment fruit shows the slightest signs of being soft as an evidence of ripeness, it is considered by them as unfit to eat. It is astonishing to see them eat hard, green peaches—clinching them in the fist, as a country boy does a hard apple, and biting off each mouthful with a loud snap. They eat their pears in the same way; cucumbers are eaten in a more unripe condition than with us even; and water-melons, which are so much inveighed against at home, are here eaten by all classes and at all times.

In fact, they seem to revel in those things which at home are considered so productive of summer-complaints; who does not recall the astonishment he has felt at the sight of country children of tender age eating green apples, green corn uncooked, and similar things, and yet suffering no ill-effects therefrom? These facts may not prove, perhaps, that unripe fruit is harmless; but, in connection with the other statements, they do show that the removal of sewage-matter from houses is the important point to consider, and that its removal insures an absence, or a less number, of cases of those diseases which enhance our death-rate at home, and lends an additional reason for the necessity of vigilance on the part of communities regarding these matters.

Concerning sunstroke, it is believed at home that one of its inciting causes is the exposure of the body or head to the overpowering heat of the sun; and the subjection of the uncovered head to the direct rays of the sun is looked upon as dangerous. On the other hand, it is admitted that intemperance in food or drink, and particularly the latter, may be inducing causes. Be that as it may, it is suggestive to note the rare occurrence of sunstroke among the Japanese, and to remark that two out of three go bareheaded. The women never have their heads covered, and the men do not always protect theirs with the sun-shade. Among the lower classes, few have their heads covered except in the hottest weather-the Jinrikisha men and the Bettoes 1 running for miles bareheaded. In most cases the head is shaved on top. If exposure of the head to the direct rays of the sun is the inducing cause of sunstroke, then here, in latitude 35°, we should expect numerous cases, while, if over-eating and overdrinking-in other words, intemperate habits-are the inducing causes, then we can understand the immunity of the Japanese from

¹ Bettoes are servants who run beside the horses or before them when one is driving.

this malady: for a more temperate and frugal people do not exist on the face of the globe.

One observes in traveling through the country the almost entire absence of deformities arising from accidents-no broken backs or broken noses, no unequal legs, or other mutilations or deformities of any sort. A fruitful source of these misfortunes at home may be traced to accidents which befall children, such as falling out of windows, tumbling down-stairs, being knocked down in the street by runaway horses, and, in later years, the deformities of the face, oftentimes the result of drunken rows and fights; the common occurrence of building-accidents, from insecure and dishonest staging, and the hundreds of other ways in which mutilations are met with in large factories. In Japan the houses are one story high; generally speaking, there are no windows to tumble out of, or flights of stairs to tumble down. Horses, except as pack-horses, are rare. The people do not have drunken brawls. Their stagings are always built to hold together, and thus pagan temples are reared, and pagan temples are repainted, without those appalling accidents which occur in a service of like nature at home. There are no big factories; and so, with these sources of danger eliminated, we find a reason, perhaps, for the absence of deformities.

In regard to the prevalence of certain other diseases which may be of interest in a paper of this nature, it is gratifying to know that small-pox, which was formerly endemic, is now coming under control by the Government taking active measures to insure vaccination. A vaccine farm is maintained, and it is compulsory on every one to be vaccinated. The frightful scourges of this disease in past times are seen in the sadly-scarred faces of so many of the people, and in the number of blind persons one encounters.

Eye-diseases of various kinds are prevalent, and near-sightedness seems very common, judging from the number of people who wear glasses. Weakness of vision must in some measure be attributed to the poor light the people provide themselves with. A dim candle, or, at most, a tiny wick resting on the edge of a vessel of vegetable oil of feeble illuminating power, and this inclosed in a paper lantern, is the almost universal lamp of the Japanese; and with this dim light the student studies his Chinese classics, the characters of which are so confusedly wrought together, and the woman performs her sewing on the customary dark-blue cloth. The gradual introduction of kerosene-oil, which is now going on, must in some way modify these troubles.

Measles is occasionally epidemic, and, owing to the exposed life of the people, often very severe. Phthisis is not more common in Japan than in our Middle States. Articular rheumatism is not com-

¹ Only within a few years have horses been used in the streets of Tokio, and a police regulation requires a man to run in front of each one in every crowded thoroughfare,

mon, but muscular rheumatism is very common. Skin-diseases are common, especially the contagious forms. The universal use of the razor in shaving, and the custom of itinerant barbers, who travel from one village to another shaving indiscriminately, indicate too plainly the reason for the prevalence of contagious diseases of the skin. In Japan everybody shaves. The men shave the tops of their heads. the beard and mustache, and, curiously enough, every portion of the face, even to the evelids (not the evelashes), the lobes of the ears, and the nose to its very tip. Married women shave their evebrows: widows and priests shave the entire scalp; babies even have their heads shaved in such a manner as to leave the most grotesque bunches of hair symmetrically disposed, like a fancy garden-plot, the remaining portions of the scalp being entirely denuded. It is rather the exception than the rule to find a child's head free from an eruption of some kind, and for this reason, as a general thing, the Japanese babies are unattractive.

My observations on the facts kindly furnished me by Dr. Eldridge apply only to the region about Tokio. The experience upon which these are made is based on a tour of a hundred miles to the northwest of Tokio, a good part of the inland journey being made on foot, many rambles through the streets of Tokio, and a six weeks' sojourn in a little village seventeen miles south of Yokohama. During all these trips and sojourns I have had my note and sketch book constantly with me, and have given the strictest attention to the sanitary condition of the houses and their surroundings.

In conclusion, it is gratifying to know that more solid progress has been made in medicine and surgery than in any other branch of Western science, and that the old Chinese system, with its grotesque absurdities, is doomed.

P. S.—Just as I am mailing this, the alarming news comes that the Asiatic cholera has made its appearance in Yokohama in the most emphatic manner. It will, of course, extend to Tokio; and, curiously enough, the very customs of the people which tend to thwart the ravages of certain other diseases will in this case be the very conditions to promote the ravages of cholera. A parallel case would be that of carefully removing the coals of fire from a building every night, as a safeguard to the structure; but let a sudden gale spring up, and the embers thus removed would be scattered far and wide.